

# 5G Technology and Applications to Smart Cities

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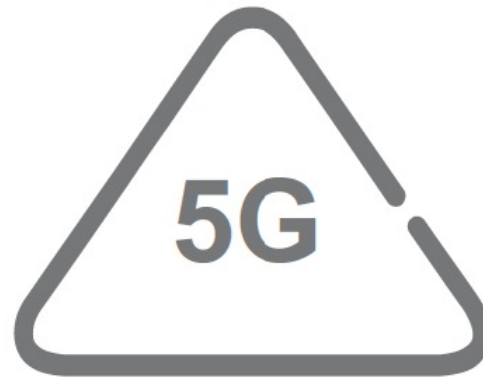
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# What is 5G?

## eMBB

High data rates, high traffic volumes



## mMTC

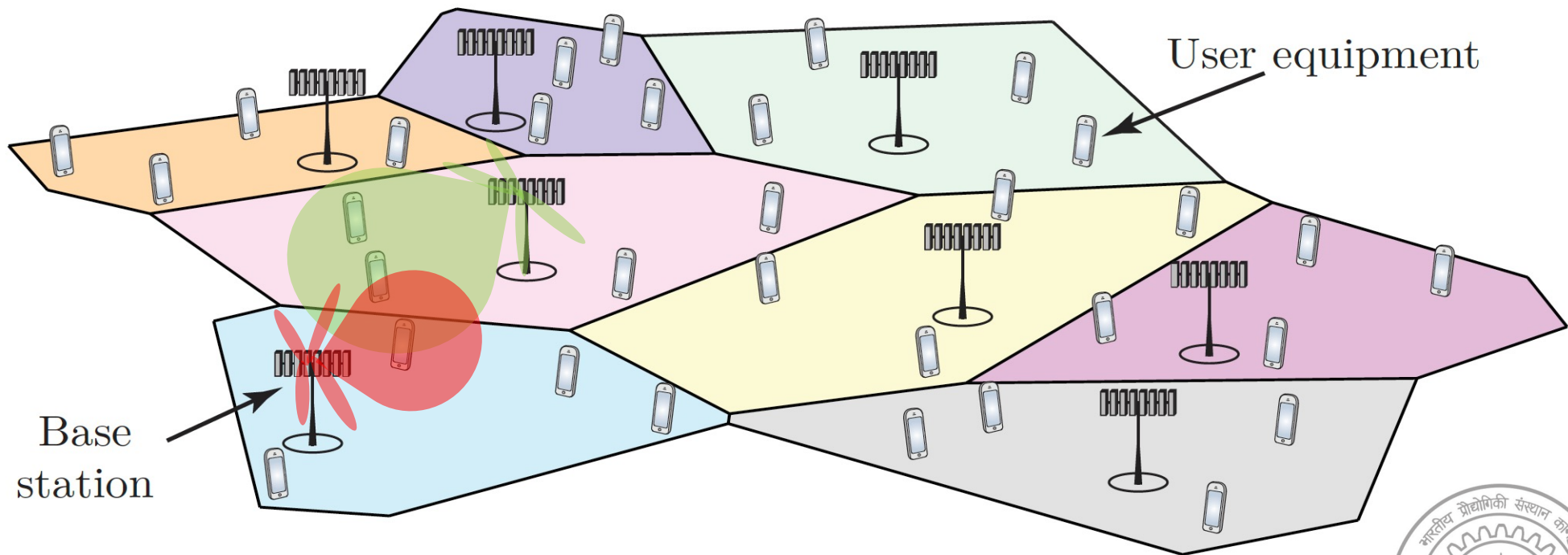
Massive number of devices,  
low cost, low energy consumption

## URLLC

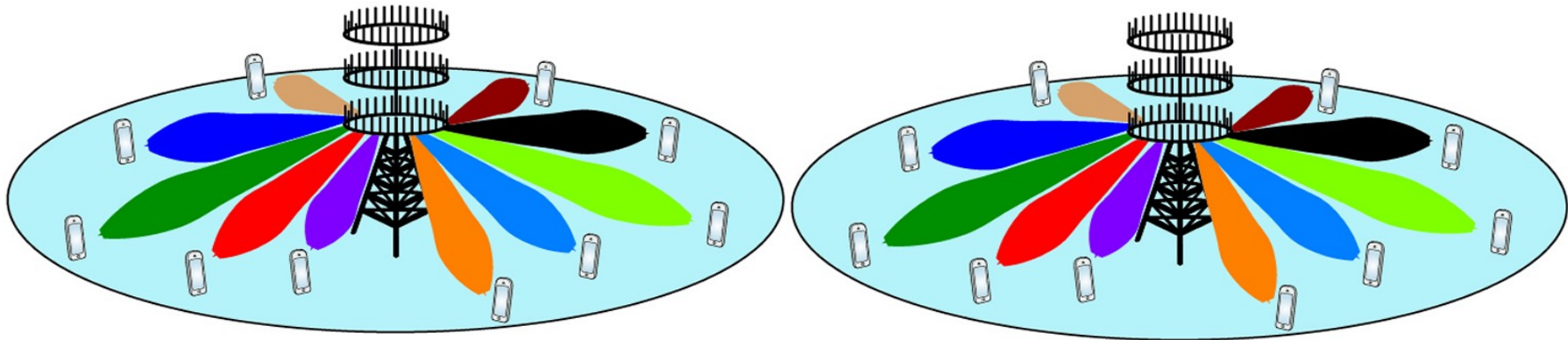
Very low latency,  
very high reliability and availability



# Cellular system layout



# Massive antennas at BS - extra Mobile Broad Band



- Large number of antennas help in forming pointed beams towards the users
  - Reduces inter-cell interference



# Massive Machine Type Communication (mMTC)

